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EXAMINER

OPIE, G

ART UNIT

PAPER NUMBER

2755

DATE MAILED: 03/15/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

Applicant(s)

Examiner

Art Unit

Opie

2755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- 1) ☒ Responsive to communication(s) filed on 12/23/95
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some * c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☐ received.
2. ☐ received in Application No. (Series Code / Serial Number) _____.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 14) ☐ Notice of References Cited (PTO-892)
- 15) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 16) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 17) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 18) ☐ Notice of Informal Patent Application (PTO-152)
- 19) ☐ Other: _____

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DETAILED ACTION

This office action is responsive to Amendment A. Claim 1 has been amended; new claims 29-41 have been added.

1. Claim Rejections - 35 U.S.C. § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. Claims 1 and 14 are rejected under 35 U.S.C. § 102(e) as being anticipated by Carlson et al (U.S. Patent 5,623,592).

As to claim 1, Carlson teaches a method for sequencing a plurality of tasks performed or controlled by a computer (cause computer 102 to drive external devices to perform the schedule of operations according to the sequence of icons, c12 l29-31) comprising:

a) placing task objects (copying or moving icons[representing task objects], c6 l36-41) in a directional field (icon sequence region 806, c12 l21-31) having a changeable directional attribute (sequencing rule may be up-to-down or down-to-up, c13 l31-37) wherein said task objects represent the tasks to be performed by said computer; and

b) sequencing (perform the operations ... in the icon sequence, c12 l49-51) by said computer, of one or more of the task objects in the directional field based on the relative spatial location of the task objects in the directional field (sequence of the icons on time line 808 determines the order in which the operations will be performed, c12 l42-47) and the directional attribute of the directional field (sequencing rule, c13 l31-37).

As to claim 14, Carlson teaches a method for sequencing a plurality of tasks performed or controlled by a computer (cause computer 102 to drive external devices to perform the schedule of operations according to the sequence of icons, c12 l29-31) comprising:

a) displaying on a computer display a user interface having a directional field (icon sequence region 806, c12 l21-31)

b) placing in response to user input, task objects in said directional field (PLACING ICONS ON THE TIME LINE, c13 l44) wherein said task objects

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(Icons, c6 l11-17) represent the tasks to be performed by said computer (iconic programming process, Id.)

c) selecting a directional attribute for said directional field (sequencing rule may be up-to-down or down-to-up, c13 l31-37)

d) sequencing (perform the operations ... in the icon sequence, c12 l49-51) by said computer, of one or more of the task objects in the directional field based on the relative spatial location of the task objects in the directional field (sequence of the icons on time line 808 determines the order in which the operations will be performed, c12 l42-47) and the directional attribute of the directional field (sequencing rule, c13 l31-37).

3. Claim Rejections - 35 U.S.C. § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-3 and 7-13 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Carlson et al (U.S. Patent 5,623,592).

As to claim 2, Carlson teaches (icon is inserted into the icon sequence at a position dependent on when the operation is to be performed relative to other operations, c21 l34-39) which corresponds to resequencing objects by changing the relative spatial location of the objects in the field.

As to claim 3, Carlson teaches (sequencing rule, c13 l31-37) which corresponds to the step of selecting a directional attribute for the directional field. It would have been an obvious modification of the sequencing rule as taught by Carlson to provide a selection for the sequencing (equivalent to the direction) rule.

As to claims 7-13, Carlson teaches (c14 l55 - c15 l28) kinetic and stacker icons which correspond to the recitations regarding the master objects, task objects, and the associations therein. It would have been obvious to modify the icon types as taught by Carlson to serve as various derived objects for structure and scope purposes.

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5. Claims 4-6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Carlson et al (U.S. Patent 5,623,592) as applied to claims 1 and 8 respectively, and further in view of Gendron et al. (U.S. Patent 4,860,204).

As to claim 4 Gendron teaches (six relevant aspects of a Softron, c11 l23-34) which corresponds to task objects having one or more modifiable properties for controlling the behavior of the task objects. It would have been obvious to combine Gendron's teachings on Softrons with the iconic programming taught by Carlson because the Softron object facilitates flexibility and power in this visual development system.

As to claim 5 Gendron teaches a technique to include or exclude a task object in the directional field from a sequence (adding or subtracting (or both) State variables and/or Machines from the existing Softron, c17 l65-68). It would have been obvious to combine the teachings of Gendron with Carlson because the adding or eliminating of task objects is vital for program control.

As to claim 6, Gendron teaches (perform some calculation based on the value of the State and/or the value of parameters fed to it, c11 l23-34) which corresponds to at least one of the modifiable properties specifies the tasks to be performed by the task object. It would have been obvious to combine Gendron's teachings on the Softron's operations with Carlson's iconic programming because the ability to specify object processes gives users' greater command over details in the visual development environment.

As to claims 15-25 note the discussions of claims 2, & 4-13 respectively.

6. Claims 29- are rejected under 35 U.S.C. § 103(a) as being unpatentable over Carlson et al (U.S. Patent 5,623,592) in view of Keller et al. (U.S. Patent 5,767,852).

As to claim 29, Carlson teaches a method for sequencing a plurality of tasks performed or controlled by a computer (cause computer 102 to drive external devices to perform the schedule of operations according to the sequence of icons, c12 l29-31) comprising:

- a) placing task objects (copying or moving icons[representing task objects], c6 l36-41) in a directional field having a directional attribute (icon sequence region 806, c12 l21-31) wherein said task objects represent the tasks to be performed by said computer; and
- b) sequencing (perform the operations ... in the icon sequence, c12 l49-51) by said computer, of one or more of the task objects in the directional field based on the relative spatial location of the task objects in the directional field (sequence of the icons on time line 808 determines the order in which the

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operations will be performed, c12 l42-47) and the directional attribute of the directional field (sequencing rule, c13 l31-37).

Carlson does not explicitly disclose a directional field having at least two dimensions.

Keller teaches the coordinates of a region 284, ... to include additional variables for higher dimensional spaces, c5 l55-61 which corresponds to a directional field having at least two dimensions. It would have been obvious to combine Keller's teachings with Carlson because the multidimensional regional relationships enable more control/direction for task management specificity.

As to claims 30-41 note the discussions of claims 2-13 above.

7. The prior art of record and not relied upon is considered pertinent to the applicant's disclosure. Each reference disclosed below is relevant to one or more of the Applicant's claimed invention.

"Widening 'world' of neural nets" Johnson, R. Colin (Electronic Engineering Times , n756 , p35, July 26, 1993) which teaches the automatic connection of components in a visual programming environment;

U.S. Patent No. 5,850,548 to Williams which teaches the operations of components/iconic tasks with respect to scope and type functioning.

8. Response to Applicant's Arguments:

Applicant argues (claims 1 and 14) that the teaching of the Carlson reference does not meet the limitations of a directional field or a changeable directional attribute. Contrary to Applicant's contention, Carlson does teach the recited directional field and selecting a directional attribute limitations as broadly claimed. The rejection of the claims contain a detailed mapping of each and every claim element with its corresponding equivalent component taught by the cited reference. The sequence region is a field with a definite direction; and, the sequencing rule provides a procedure for altering the directional characteristic which is a changeable directional attribute. The scope of the claimed "directional field and changeable directional attribute" clearly transcends the more narrow scope that Applicant attempts to impute through argument. Claimed subject matter, not the specification is the measure of the invention. Limitations in the specification cannot be read into the claims for the purpose of avoiding the prior art, *In re Self*, 213 USPQ 1,5 (CCPA 1982); *In re Priest*, 199 USPQ 11, 15 (CCPA 1978). The aforementioned claim elements are clearly subject to a broad interpretation, as detailed in the rejections maintained above. The Examiner has a *duty* and *responsibility* to the public and to Applicant to interpret the claims as

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broadly as reasonably possible during prosecution (see In re Prater, 56 CCPA 1381, 415F.2d 1393, 162 USPQ 541 (1969)).

Applicant's arguments have been fully considered but they are not deemed to be persuasive.

9. THIS ACTION IS MADE FINAL.

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

10. Requested Format of Amended Claims:

Please help expedite the prosecution of this application by including the text of all claims which remain in the case in your amendment response. Please label each amended claim as (AMENDED), or (TWICE AMENDED), or (THREE TIMES AMENDED), etc., after the claim number. Please label each unchanged claim (UNCHANGED) after the claim number [meaning the claim is the same as originally filed]. Please label each canceled claim (CANCELED) after the claim number. The text of a canceled claim does not need to be included. This format is not mandatory, however, it will help expedite the processing of your application. Your cooperation is appreciated.

11. Request for copy of Applicant's response on floppy disk:

The Examiner requests that any amendment response be in paper form accompanied by a 3 1/2 inch IBM format floppy disk which contains a file copy of the amendment response in WordPerfect, Microsoft Word, or in ASCII text format. Please include all pending claims, as detailed above. Only the paper copy will be entered – the floppy disk file will be considered a duplicate copy. Signatures are not required on the disk copy. The floppy disk copy is not mandatory, however, your cooperation is appreciated.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Opie whose telephone number is (703) 308-9129.

ALVIN E. OBERLEY
SUPERVISORY PATENT EXAMINER
GROUP 2700